

BA Sem II: Linguistics, Paper II (Sounds of Language II)

MORPHOPHONEMIC ALTERNATION

The smallest minimal meaningful elements in language are known as morphemes. For instance, words like *man*, *cat*, *bag* etc. have a single morpheme each. But words like *men*, *cats*, *bags* and so on consist of two morphemes each: one, the morpheme available as singular forms referring to different entities, and two, the morpheme meaning 'plural' signified by the suffix *-s*. Similarly, the words like *play*, *kill* and *pick* have one morpheme each. But words like *played*, *killed* and *picked* consists of two morphemes each: one, the verb itself and two, the morpheme with the meaning 'past tense' in English realized as the suffix *-ed*.

Sometimes, a morpheme could have different phonological shapes depending on the contexts they occur in. For instance, the regular plural morpheme in English is formed by adding an *s*-ending to the nouns. But this *s*-ending to the nouns, which is phonetically a voiceless alveolar fricative [s], is pronounced differently as [s], [z] or [əz] in different words as given below:

caps [kæps]

cabs [kæpz]

bush [bʊ əz]

If we look carefully at these words, we observe that it is the final sound segment of the noun that determines these phonological shapes of the plural morpheme. If the nouns ends in voiceless consonants as in *cap*, *bat*, *sack*, *booth* etc. the plural morpheme will take the shape [s] and if it ends in voiced consonants as in *bag*, *nib*, *toad* it takes the shape [z]. If the noun ends in sibilants as in *bus*, *wage*, *catch*, *brush* etc., the plural occurs in the form [əz] because it is not possible to pronounce two sibilants distinctly in succession. So a vowel is inserted in between them in this case.

So it is the alternation of the phonological shapes of a morpheme depending on the context it occurs in which is known as **Morphophonemic alternation**.

The past tense morpheme in English also patterns the same way as above.

The past morpheme realized as the suffix *-ed* is pronounced as [t] after voiceless consonant ending verbs, while after voiced consonant ending verbs it is pronounced as [d].

pick[t], pack[t], memorize[d], play[d], pull[d], cook[t], move[d]

But after verbs ending in either /t/ or /d/, it is articulated as [ɪd]

wait[ɪd], nod[ɪd], [board[ɪd], court[ɪd]: it is because you cannot pronounce two stops involving the same place of articulation distinctly, when placed consecutively without the intervention of a vowel.

DISTRIBUTION OF SOUNDS IN LANGUAGES

Contrastive Distribution: Phonemes in a language stand in contrast with respect to one another in minimal pairs for instance. They are said to involve contrastive distribution. Eg. /t/ and /d/ in Wheat, weed, seat, seed

Complementary distribution: The positional variants of a phoneme are known as allophones. They occur in complementary distribution with respect to one another. In other words each one of the variants of a phoneme occur in a position where the other variant is excluded from occurrence. For instance, the allophone [ɳ] of the phoneme /n/ in Hindi is excluded from occurrence in positions where [n] is found, as in [santaan], and allophone [n] is also excluded from position where only [ɳ] is found, as in [pa jaa], [a cal],[ku jii] etc.

Free Variation: Sometime sounds which are known to be independent phonemes in a language could occur in place of one another, i.e. interchangeably, in certain words without making them different in meaning. In such cases the given phonemes are said to be in free variation with respect to one another in those words.

Eg: Hindi : [diiwaar] and [diiwaal] are both acceptable in Hindi for 'wall' but they have [l] or [r] as the word final consonant. However, we know that [l] and [r] are independent phonemes in Hindi as borne out by minimal pairs like [taar] 'wire] and [taal] 'beat', or [par] 'wing' and [pal] 'moment'. Thus we say that the phonemes /l/ and /r/ are in Free Variation in only the word /Diwaar/ in Hindi.

In English, the word *economics* is acceptable as [kan miiks] or /ikan miiks] in some varieties. But the vowels [ɪ] and [i] are well known to constitute separate phonemes in English, given minimal pairs like [bɪt] and [bit] or [wɪt] and [wit]. So, then, only words like *economics* and either are these phonemes /ɪ/ and /i/ found in free variation.

Neutralization: Just the opposite of Free variation is found in languages, when what are known to be two separate phonemes, are pronounced with the same sound in a certain position within a word. For instance, in varieties of English where intervocalic /t/ and /d/ are flapped, both get pronounced in the same way i.e. somewhat like [ɾ]. Then in words like *writer* and *rider* both get articulated as [raid ar], making them indistinguishable phonetically. In these words, the distinction between /t/ and /d/ get neutralized as a flapped articulation [ɾ].

In Hindi, the distinction between voiceless stops and its aspirated correspondents in word final position may get neutralized as a plain voiceless stop phonetically. For instance, both /saat/ 'seven' and /saat^h/ 'with' may get pronounced as [saat] in fast speech, neutralizing the distinction between their word final phonemes.